# Proposed Criteria for the Selection of Covered Species and Initial Covered Species Evaluation

Habitat Conservation Plans, Natural Community Conservation Plans, and permit applications under the California Endangered Species Act must identify species that are proposed for take authorizations. These species are typically referred to as "covered species." A complete list of proposed covered species is necessary to inform the development of the BDCP's conservation measures, including avoidance and minimization measures, and to ensure that the measures specifically address all species that will need authorization under the BDCP in accordance with relevant legal standards.

The Endangered Species Act (ESA), the California Endangered Species Act (CESA), the Natural Community Conservation Planning Act (NCCPA) [and other state and federal laws] each set forth specific criteria that must be met for a species to be covered. The terms "coverage" and "covered" species as used in this proposal are intended to refer broadly to regulatory coverage under the ESA, CESA, or the NCCPA. The species identified in this handout are suggested for consideration for coverage because of the possibility that some form of incidental take authorization or other authorization for the species may be required to implement BDCP covered activities and conservation measures. The list of potential covered species is by no means intended to capture all species that occur in the natural communities under consideration in the BDCP or all species and habitats that will directly or indirectly benefit from implementation of the BDCP. Many conservation measures developed to benefit a covered species, such as habitat restoration actions will likely benefit numerous species. The Steering Committee may also elect to include in the BDCP additional measures that benefit non-covered species and natural communities.

This list of potential covered species focuses only on species for which regulatory coverage may be needed. It is limited to certain species currently protected under state or federal wildlife laws, for which the PREs may have to obtain take authorizations or other authorizations, and to certain additional species that the PREs may want covered in the BDCP because of the likelihood that these species will be protected under state or federal law in the future. It does not attempt to specify which authorization will be needed for each species. The specific permits and permitting standards that will apply to each species can be determined once the impacts of proposed covered activities and conservation measures are more fully analyzed. For example, it may be appropriate to use one approach to permitting for species that will be affected by the covered activities and another for species that will be affected only by implementation of proposed conservation measures, such as habitat restoration actions.

The list of proposed covered species that will be used to inform the development of conservation measures (whether or not it is the list recommended here) will likely be a "work in progress" for some time as the BDCP is developed. Species may be added or removed as more is learned about the impacts of covered activities, the benefits of conservation measures, the status of affected species, or other new information. The list of covered species may also ultimately be somewhat different for federal actions than for non-federal actions covered under the BDCP. Likewise, throughout the BDCP planning process reference will be made to "proposed covered species" in recognition of the fact

that the Fishery Agencies will ultimately determine which species are adequately covered by the BDCP at the conclusion of the BDCP permitting processes.

## **Species Evaluated for Coverage**

Species evaluated for BDCP coverage were limited to special-status species that are known to occur or are likely to occur in the BDCP Planning Area. Special-status species were defined as species that are:

- listed as threatened or endangered under the ESA;
- proposed or candidates for listing under ESA;
- listed as threatened or endangered under the California Endangered Species Act (CESA);
- candidates for listing under CESA;
- California species of special concern;
- California fully protected species;
- U.S. Fish and Wildlife Service (USFWS) birds of conservation concern;
- National Marine Fisheries Service (NMFS) species of concern;
- plants listed as rare under the California Native Plant Protection Act (NPPA); or
- plants included in the California Native Plant Society (CNPS) List 1A, 1B, or 2.

Four criteria were used to evaluate the special-status species for coverage in the BDCP. The evaluation criteria, which are discussed in detail in Attachment 1, include:

- 1. Listing status of considered species
- 2. Occurrence of species in the Planning Area
- 3. Potential to be adversely affected by BDCP actions (covered activities and conservation measures)
- 4. Sufficient information to determine species impacts and develop conservation measures

The evaluation results for each of the species considered using the four selection criteria are presented in Exhibits 1 through 4, attached. Exhibit 1 provides an evaluation of potential coverage for listed fish and wildlife species while Exhibit 2 evaluates potential coverage of non-listed fish and wildlife species. Similarly, Exhibit 3 focuses on listed plants and Exhibit 4 provides the evaluation of non-listed plants.

## **Summary of Evaluation of Potential Covered Species**

Based on the evaluations for potential coverage presented in Exhibits 1-4, the species determined to have met all four of the selection criteria and may warrant coverage under the BDCP are listed below. These species are separated into two categories: 1) listed species and 2) non-listed species. California Fully Protected species are identified

separately as a category of species that require special consideration. A fourth category of species—evaluation species—is also included. These are species for which one or more criteria are uncertain and for which additional information is required.

# Endangered, Threatened, and Rare Fish, Wildlife, and Plant Species

The following species are proposed for consideration as covered species under the BDCP. These species are listed under ESA and/or CESA and meet the species evaluation criteria for covered species. As noted above, the final list of proposed covered species and the exact nature of coverage required under the BDCP will be determined later based on information developed throughout the BDCP planning process.

- Riparian brush rabbit (Sylvilagus bachmani riparius)
- Swainson's hawk (*Buteo swainsoni*)
- Giant garter snake (*Thamnophis gigas*)
- Delta smelt (*Hypomesus transpacificus*)
- Steelhead, Central Valley DPS (Oncorhynchus mykiss)
- Chinook salmon, Sacramento River winter-run (Oncorhynchus tshawytscha)
- Chinook salmon, Central Valley spring-run (Oncorhynchus tshawytscha)
- Green sturgeon (*Acipenser medirostris*)
- Conservancy fairy shrimp (*Branchinecta conservation*)
- Longhorn fairy shrimp (*Branchinecta longiantenna*)
- Vernal pool fairy shrimp (Branchinecta lynchi)
- Vernal pool tadpole shrimp (*Lepidurus packardi*)
- Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)
- Soft bird's-beak (*Cordylanthus mollis ssp. mollis*)
- Delta button celery (*Eryngium racemosum*)
- Mason's lilaeopsis (*Lilaeopsis masonii*)

Note that the ESA generally does not prohibit the take of plants by non-federal entities, except under certain narrow circumstances, and CESA affords certain exemptions to its take prohibitions for plants, which may apply to certain proposed BDCP covered activities. However, take of listed plants is generally prohibited by the CESA, and impacts on listed plants must be addressed in ESA Section 7 consultations, including consultations regarding federal permitting actions such as the issuance of an incidental take permit under Section 10 of the ESA. Plant species were therefore evaluated for coverage, even though it is not yet clear the extent to which take authorizations for plant species will be required for BDCP covered activities and conservation measures.

## Non-listed Fish, Wildlife, and Plant Species

Evaluation of non-listed species was limited to special-status species because these species are recognized by federal and state wildlife agencies as declining and, therefore, are more likely than other non-listed species to become listed over the term of the BDCP permits. These species should be considered for coverage based on the likelihood for

listing under ESA or CESA within BDCP permit duration and as more information becomes known on BDCP activities and related affects.

- Suisun shrew (Sorex ornatus sinuosus)
- Tricolored blackbird (*Agelaius tricolor*)
- Yellow breasted chat (*Icteria viriens*)
- Western burrowing owl (Athene cunicularia)
- Western spadefoot toad (Spea hammondii)
- Longfin smelt (*Spirinchus thaleichthys*)
- Chinook salmon, Central Valley fall-/late fall-run (*Oncorhynchus tshawytscha*)
- Sacramento splittail (Pogonichthys macrolepidotus)
- White sturgeon (*Acipenser transmontanus*)
- River lamprey (*Lampetra ayresii*)
- Suisun Marsh aster (Aster lentus)
- Delta tule pea (*Lathyrus jepsonii var. jepsonii*)
- Delta mudwort (*Limosella subulata*)
- Alkali milk-vetch (Astragalus tener var. tener)
- San Joaquin spearscale (Atriplex joaquiniana)
- Legenere (*Legenere limosa*)
- Heckard's peppergrass (*Lepidium latipes var. heckardii*)

## **Fully Protected Species**

The California Department of Fish and Game cannot authorize incidental take of species that are "fully protected" under the California Fish and Game Code. Fully protected species are identified separately to make it clear that while they would not be proposed for take authorization, avoidance measures will be incorporated if necessary to ensure that no take would result from BDCP actions.

- Salt marsh harvest mouse (*Reithrodontomys ravivenstris*)
- Greater sandhill crane (*Grus canadensis tabida*)
- California black rail (Laterallus jamaicensis coturniculus)
- California clapper rail (Rallus longirostris obsoletus)

# Species to be Evaluated Further

A number of special-status species should be evaluated further to assess the potential need for regulatory coverage under the BDCP. These are species for which one or more criteria are uncertain and for which additional information is needed to determine if the criteria are met. .

## Listed Endangered, Threatened, and Rare Species to be Evaluated Further

- Riparian woodrat (*Neotoma fuscipes riparia*)
- Snowy plover (coastal population) (Charadrius alexandrinus)

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- California tiger salamander (Central Valley DPS) (Ambystoma californiense)
- Succulent owl's clover (Castilleja campestris ssp. succulent)
- Boggs Lake hedge-hyssop (*Gratiola heterosepala*)
- San Joaquin Valley Orcutt grass (Orcuttia inaequalis)
- Hairy Orcutt grass (Orcuttia pilosa)
- Slender Orcutt grass (Orcuttia tenuis)
- Sacramento Orcutt grass (Orcuttia viscida)
- Greene's tuctoria (*Tuctoria greenei*)

## Non-Listed Species to be Further Evaluated

- Snowy plover (interior population) (*Charadrius alexandrinus*)
- Suisun song sparrow (Melospiza melodia maxillaries)
- Tule white-fronted goose (*Anser albifrons elgasi*)
- Coast horned lizard (*Phrynosoma coronatum frontale*)
- Pacific smelt (*Thaleichthys pacificus*)
- Slough thistle (*Cirsium crassicaule*)
- Heartscale (Atriplex cordulata)
- Brittlescale (*Atriplex depressa*)
- Vernal pool smallscale (Atriplex persistens)
- Big tarplant (*Blepharizonia plumose*)
- Lesser saltscale (*Atriplex minuscula*)
- Bristly sedge (Carex comosa)
- Round-leafed filaree (*Erodium macrophyllum*)
- Fragrant fritillary (*Fritillaria liliacea*)
- Ahart's dwarf rush (Juncus leiospermus var. ahartii)
- Caper-fruited tropidocarpum (*Tropidocarpum capparideum*)

### **Information Sources**

Sources of information used to identify the special-status species that could be present in the BDCP Planning Area include:

- Department of Fish and Game's (DFG's) California Natural Diversity Database (CNDDB);
- DFG's Wildlife Habitat Relationships species lists;
- species lists in the CALFED Multi-Species Conservation Strategy;
- species occurrence and habitat information provided in documents prepared for other HCPs and NCCPs with planning areas adjacent to the BDCP Planning Area; and

• species-specific occurrence information provided in documents available on DFG's, USFWS's, and NMFS's websites and other websites.

Special-status species of fish, wildlife, and plants known or likely to occur in the BDCP Planning Area are based on the sources of information described above.



### **Attachment 1**

# **Criteria for Selection of Covered Species**

Four criteria were used by SAIC to evaluate the species identified in Exhibits 1-4 for possible coverage under the BDCP. These criteria have been used in other HCPs and NCCPs to identify covered species and represent an accepted approach. All four of the criteria must be met for a species to be recommended for coverage.

1. **Listing Status:** The species is listed under ESA, CESA, or the California Native Plant Protection Act (NPPA) or could become listed during the term of BDCP permits. Species listed as threatened or endangered under ESA or CESA, as rare under NPPA, or state fully protected meet this criteria as already listed.

Non-listed species were considered likely to become listed in the future if:

- they are currently proposed for listing under ESA or are candidates for listing under ESA or CESA;
- they are a special-status species whose populations or habitats are greatly limited and are continuing to decline;
- they are covered under permits by other HCPs in northern California;
- FWS, NMFS, or DFG have indicated that a listing petition or listing package is likely to come forward; and
- a substantial proportion of their population is located in the Planning Area and could be substantially adversely affected by covered activities and conservation measures.

The potential for listing criterion will be updated if new information becomes available that could change the listing potential indicated in Exhibits1-4. In many instances it is uncertain whether a species is likely to become listed and that uncertainty is noted on the table.

2. **Occurrence in the Planning Area:** The species is known to occur in the planning area or is likely to occur based on presence of habitat in the Planning Area and known occupied habitat near the Planning Area.

While all species listed in Exhibits 1-4 should meet this criterion, there are a number of species included on the table for which presence in the Planning Area is uncertain. The table column codes for this criterion identify species that are known to occur in the Planning Area with a "+" and those species for which the evidence indicates a probability that they could present but presence is uncertain with a "U".

- 3. **Potential to Adversely Affect:** The species or its habitat could be affected by the types of activities and conservation measures anticipated to be covered under the BDCP. The type of action that could affect the species is identified by a code in the table column:
  - "H" = could be affected by habitat restoration activities;

- "ID" = could be affected by in-Delta conveyance improvement facilities;
- "AD" = could be affected by an around-the-Delta conveyance along the eastern edge of the Planning Area; and
- "O" = could be affected by water operations.

Key assumptions regarding covered activities and conservation measures used to determine the potential to adversely affect species include the following.

- An around-Delta aqueduct would be siphoned under all tidal channels/sloughs such that impacts on tidal waters and riparian habitat within the floodplain would be avoided.
- Conservation measures could be implemented anywhere in lowland portions of the Planning Area that would likely be suitable for restoration of shallow subtidal aquatic, pelagic, intertidal marsh, floodplain riparian, and floodplain habitats.
- No facilities or habitat restoration would be constructed in uplands on the western edge of the Planning Area

Because covered activities and conservation measures will become more precisely defined over the course of BDCP planning, the likelihood for each species to be adversely affected by BDCP implementation will periodically be reassessed.

4. **Sufficient Information:** Sufficient scientific information and data are available to determine the likely impacts of the covered activities on the species and to formulate conservation measures that could effectively mitigate and conserve the species. Some species are so poorly understood, that appropriate evaluations cannot be performed for permitting processes under the current state of knowledge. A guide for this criterion is if the species is covered or proposed for coverage under other HCPs and NCCPs, which indicates a confidence that sufficient information is available to cover the species.

Exhibit 1. Evaluation of Listed Endangered and Threatened and Fully Protected Fish and Wildlife Species Known or Likely to Occur in the Planning Area for Coverage under the BDCP

	•					
			SELECTION CRITER	IA FOR COVERAG	E <sup>b</sup>	
Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	Consider for Coverage?
Species Associated with Propose	d Covered Natura	al Communit	ties			
Listed Species						
Mammals						
Neotoma fuscipes riparia Riparian woodrat	E/SSC	+	U	U	+	Undetermined
Sylvilagus bachmani riparius Riparian brush rabbit	E/E	+	+	+ (H, ID)	+	Yes
Birds						
Riparia riparia Bank swallow	-/T	+	+	-	+	No
Coccyzus americanus occidentailis Western yellow-billed cuckoo	BCC /E	+	+	-	+	No
Charadrius alexandrinus Snowy plover (coastal population)	T/SSC	+	U	U	+	Undetermined
Buteo swainsoni Swainson's hawk	BCC /T	+	+	+ (H, ID, AD)	+	Yes
Reptiles						
Thamnophis gigas Giant garter snake	T/T	+	+	+ (H, ID, AD)	+	Yes
Fish						
Hypomesus transpacificus* Delta smelt	T/T	+	+	+ (ID, O)	+	Yes

			SELECTION CRITER	IA FOR COVERAG	E <sup>b</sup>	Consider for Coverage?
Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
Oncorhynchus mykiss* Steelhead, Central Valley DPS	T/-	+	+	+ (ID, O)	+	Yes
Oncorhynchus tshawytscha* Chinook salmon, Sacramento River winter-run	E/E	+	+	+ (ID, O)	+	Yes
Oncorhynchus tshawytscha* Chinook salmon, Central Valley spring-run	T/T	+	+	+ (ID, O)	+	Yes
Acipenser medirostris Green sturgeon	T/SSC	+	+	+ (ID, O)	+	Yes
Invertebrates						
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	Т/-	+	+	+ (H, ID, AD)	+	Yes
Fully Protected Species						
Mammals						
Reithrodontomys ravivenstris Salt marsh harvest mouse	E/E,FP	+	+	+ (H)	+	Yes
Birds						
Sterna antillarum browni California least tern	E/E,FP	+	+	-	+	No
Laterallus jamaicensis coturniculus California black rail	BCC/T,FP	+	+	+ (H, ID, AD)	+	Yes
Rallus longirostris obsoletus California clapper rail	E/E,FP	+	+	+ (H)	+	Yes

			SELECTION CRITER	IA FOR COVERAG	E <sup>b</sup>	Consider for Coverage?
Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
Haliaeetus leucocephalus Bald eagle	T,PD/E,FP	+	+	-	+	No
Elanus leucurus White-tailed kite	-/FP	-	+	+ (H, ID, AD)	+	No
Species Associated with other Plan	nning Area Natura	al Communit	ies			
Listed Species						
Mammals						
Vulpes macrotis mutica San Joaquin kit fox	E/T	+	+	-	+	No
Amphibians						
Ambystoma californiense California tiger salamander (Central Valley DPS)	T/SSC	+	+	U	+	Undetermined
Rana aurora draytonii California red-legged frog	T/SSC	+	+	-	+	No
Invertebrates						
Branchinecta conservatio Conservancy fairy shrimp	E/-	+	+	+ (H, AD)	+	Yes
Branchinecta longiantenna Longhorn fairy shrimp	E/-	+	+	+ (H, AD)	+	Yes
Branchinecta lynchi Vernal pool fairy shrimp	Т/-	+	+	+ (H, AD)	+	Yes
Lepidurus packardi Vernal pool tadpole shrimp	E/-	+	+	+ (H, AD)	+	Yes

			SELECTION CRITER	ia For coverag	E <sup>b</sup>	
Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	Consider for Coverage?
Elaphrus viridis Delta green ground beetle	E/-	+	+	1	+	No
Apodemia mormo langei Lange's metalmark	E/-	+	+	-	+	No
Fully Protected Species					7	
Grus canadensis tabida Greater sandhill crane	-/T,FP	+	+	+ (H, AD)	+	Yes
Aquina chrysaetos Golden eagle	-/FP	+	+	-	+	No

## <sup>a</sup>Status Explanations

#### **Federal**

E = listed as endangered under the federal Endangered Species Act (ESA)

T = listed as threatened under the federal ESA PD = proposed for delisting under federal ESA

BCC = U.S. Fish and Wildlife Service bird of conservation concern

NSC = National Marine Fisheries Service species of concern

– no status

#### State

E = listed as endangered under the California ESA T = listed as threatened under the California ESA

SCD = candidate for delisting

FP = fully protected under the California Fish and Game Code

SSC = California species of special concern

– no status

## <sup>b</sup> Criteria met or not

+ = Species meets the selection criterion

= Species does not meet the selection criterion

U = Uncertain whether species meets selection criterion. More investigation

required.

# <sup>c</sup> BDCP Actions (covered activities and conservation measures) potentially adversely affecting the species

H = habitat restoration actions ID = in-Delta conveyance facilities AD = around-Delta conveyance facilities

O = water operations

<sup>\*</sup> ESA designated critical habitat for this species is present in the Planning Area.

Exhibit 2. Evaluation of Non-Listed Special-Status Fish and Wildlife Species Known or Likely to Occur in the Planning Area for Coverage under the BDCP

	SELECTION CRITER	LA FOR COVERAC	Ep									
			SELECTION CRITER	IIA FUK CUVERAG.	E I	-						
Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	Consider for Coverage?						
Species Associated with Propose	Species Associated with Proposed Covered Natural Communities											
Mammals					<b>Y</b>							
Antrozous pallidus Pallid bat	-/SSC	-	+	U	+	No						
Corynorhinus townsendii Townsend's western big-eared bat	-/SSC	-	+	<u></u>	+	No						
Eumops perotis californicus Western mastiff bat	-/SSC	-	+	-	+	No						
Sorex ornatus sinuosus Suisun shrew	-/SSC	+	+	+ (H)	+	Yes						
Birds												
Xanthocephalus xanthocephalus Yellow-headed blackbird	-/SSC	-	+	+ (H, AD)	+	No						
Agelaius tricolor Tricolored blackbird	BCC/SSC	+	+	+ (H, AD, ID)	+	Yes						
Melospiza melodia maxillaries Suisun song sparrow	BCC/SSC	+	U	U	+	Undetermined						
Icteria viriens Yellow breasted chat	-/SSC	+	+	+ (H, AD)	+	Yes						
Lanius ludovicianus Loggerhead shrike	BCC/SSC	-	+	+ (H, AD)	+	No						

			SELECTION CRITER	RIA FOR COVERAG	E <sup>b</sup>	Consider for Coverage?
Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
Melanerpes lewis Lewis's woodpecker	BCC/-	-	+	+	+	No
Asio flammeus Short-eared owl	-/SSC	-	+	+ (H, AD)	+	No
Asio otus Long eared owl	-/SSC	-	+	+ (H, AD)	+	No
Chlidonias niger Black tern	-/SSC	-	+	+ (H)	+	No
Numenius americanus Long-billed curlew	BCC	-	+	+ (H, AD)	+	No
Charadrius alexandrinus Snowy plover (interior population)	-/SSC	+	U	U	+	Undetermined
Circus cyaneus Northern harrier	-/SSC	-	+	+ (H, AD)	+	No
Anser albifrons elgasi Tule white-fronted goose	-/SSC	+	U	U	+	Undetermined
Reptiles						
Emys marmorata Western pond turtle	-/SSC	-	+	+ (H, ID, AD)	+	No
Fish						
Pogonichthys macrolepidotus Sacramento splittail	-/SSC	+	+	+ (ID, O)	+	Yes
Spirinchus thaleichthys Longfin smelt	-/C	+	+	+ (ID, O)	+	Yes

			SELECTION CRITER	RIA FOR COVERAGE	Ep	
Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	Consider for Coverage?
Thaleichthys pacificus Pacific smelt	- <sup>d</sup> /SSC	+	U	U	+	Undetermined
Mylopharadon conocephalus Hardhead	-/SSC	-	+	+ (ID, O)	+	No
Lavinia symmetricus ssp. symmetricus California roach, Sacramento-San Joaquin subspecies	-/SSC	-	+	+ (ID, O)	+	No
Oncorhynchus tshawytscha Chinook salmon, Central Valley fall- /late fall-run	NSC /SSC	+	+	+ (ID, O)	+	Yes
Acipenser transmontanus White sturgeon	-/- <sup>e</sup>	+	+	+ (ID, O)	+	Yes
Lampetra ayresii River lamprey	-/SSC	+	+	+ (ID, O)	+	Yes
Species Associated with other Plan	nning Area Natura	al Communit	ies			
Taxidea taxus American badger	-/SSC	-	+	+ (AD)	+	No
Athene cunicularia Burrowing owl	BCC/SSC	+	+	+ (AD)	+	Yes
Charadrius montanu Mountain plover	BCC /SSC	-	+	+ (H, AD)	+	No
Grus canadensis canadensis Lesser sandhill crane	-/SSC	-	+	+ (H, AD, ID)	+	No
Falco mexicanus Prairie falcon	ВСС	-	+	-	+	No

			SELECTION CRITERIA FOR COVERAGE <sup>b</sup>					
Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	Consider for Coverage?		
Phrynosoma coronatum frontale Coast horned lizard	-/SSC	+	U	U	+	Undetermined		
Anniella pulchra pulchra Silvery legless lizard	-/SSC	-	+	-	+	No		
Spea hammondii Western spadefoot toad	-/SSC	+	+	+ (H, AD)	+	Yes		

## <sup>a</sup>Status Explanations

#### **Federal**

BCC = U.S. Fish and Wildlife Service bird of conservation concern

NSC = National Marine Fisheries Service species of concern

– = no status

#### State

SSC = California species of special concern C = Candidate for listing under CESA

– = no status

#### <sup>b</sup> Criteria met or not

+ = Species meets the selection criterion

– Species does not meet the selection criterion

U = Uncertain whether species meets selection criterion. More investigation required.

# <sup>c</sup> BDCP Actions (covered activities and conservation measures) potentially adversely affecting the species

H = habitat restoration actions ID = in-Delta conveyance facilities

AD = around-Delta conveyance facilities

O = water operations

 $<sup>^{</sup>m d}$  NMFS has accepted a petition to list the species and is currently conducting a status review as of 3/12/08

<sup>&</sup>lt;sup>e</sup> White sturgeon is included as a covered species in accordance with the BDCP Planning Agreement

Exhibit 3. Evaluation of Listed Endangered, Threatened, and Rare Plant Species Known or Likely to Occur in the Planning Area for Coverage Under the BDCP

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/ State/ CNPS)	Listing Potential	SELECTION CRITERIA  Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	Consider for Coverage?				
Species Associated with Proposed	Covered Natura	l Communities								
Cordylanthus mollis ssp. mollis Soft bird's-beak	E/R/IB	+	+	+ (H, O)	+	Yes				
Eryngium racemosum Delta button celery	-/E/1B	+	+	+ (H, ID, O)	+	Yes				
Lilaeopsis masonii Mason's lilaeopsis	-/R/1B	+	+	+ (H, ID, O)	+	Yes				
Species Associated with other Plann	Species Associated with other Planning Area Natural Communities									
Amsinckia grandiflora Large-flowered fiddleneck	E/E/1B	+	U	-	+	No				
Castilleja campestris ssp. succulenta Succulent owl's clover	T/E/1B	+	U	U	+	Undetermined				
Erysimum capitatum spp. angustatum * Contra Costa wallflower	E/E/1B	+	+	-	+	No				
Gratiola heterosepala Boggs Lake hedge-hyssop	-/E/1B	+	+	U	+	Undetermined				
Lasthenia conjugens Contra Costa goldfields	E/-/1B	+	+	-	+	No				
Neostapfia colusana Colusa grass	T/E/1B	+	+	-	+	No				
Oenothera deltoides ssp. howellii * Antioch Dunes evening primrose	E/E/1B	+	+	-	+	No				

Scientific Name/	Status <sup>a</sup>	S	ELECTION CRITERIA	FOR COVERAGE	Ep	
Common Name	(Federal/ State/ CNPS)	Listing Potential	Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	Consider for Coverage?
Orcuttia inaequalis San Joaquin Valley Orcutt grass	T/E/1B	+	U	U (AD)	+	Undetermined
Orcuttia pilosa Hairy Orcutt grass	E/E/1B	+	Ŭ	U (AD)	+	Undetermined
Orcuttia tenuis Slender Orcutt grass	T/E/1B	+	U	U (AD)	+	Undetermined
Orcuttia viscida Sacramento Orcutt grass	E/E/1B	+	U	U (AD)	+	Undetermined
Trifolium amoenum Showy indian clover	E/-/1B	+	U	-	+	No
Tuctoria greenei Greene's tuctoria	E/R/1B	+	U	U (AD)	+	Undetermined
Tuctoria mucronata Solano grass	E/E/1B	+	+	-	+	No

	Scientific Name/	Status <sup>a</sup>	SELECTION CRITERIA FOR COVERAGE <sup>b</sup>					
	v	(Federal/			Potential to		Consider for	
	Common Name	State/ CNPS)	Listing	Occurrence	e in be Adversely	Sufficient	Coverage?	
		2101107 0111 27	Potential	the Plan Ar	rea Affected <sup>c</sup>	Information	Coverage:	
<sup>a</sup> Status	<sup>a</sup> Status Explanations				or not			
Fede				+ = spec	cies meets the selection crit	erion.		
E	= listed as endangered under the fe	ederal Endangered S	pecies Act (ESA)		cies does not meet the selec			
T	= listed as threatened under the fee	deral ESA		U = Unc	certain whether species mee	ts selection criterio	n. More investigation	
C :	= candidate for listing under the fe	ederal ESA		required.	•			
_	= no status							
				c BDCP Action	ns (covered activities an	d conservation me	easures) potentially	
State	e			adversely affect	ting the species			
E	= listed as endangered under the C	California ESA		H = habitat restoration actions				
T :	= listed as threatened under Califo	rnia ESA		ID = in-Delta conveyance facilities				
R	= listed as rare under the Californi	a Native Plant Prote	ction Act	AD = around-Delta conveyance facilities				
_	= no status			O = water operations				
Calif	fornia Native Plant Society (CNPS)			* Critical habita	at for this species is present	in the planning area	1	
1A	= presumed extinct in California			Critical habita	at for this species is present	in the planning area	•	
1B	= rare or endangered in California	and elsewhere						
2	= rare and endangered in Californi		ewhere					
_	= no status.							

Exhibit 4. Evaluation of Non-Listed Special-Status Plant Species Known or Likely to Occur in the Planning Area for Coverage Under the BDCP

Scientific Name/	Status <sup>a</sup>	S	SELECTION CRITERIA	FOR COVERAGE	Ep	
Common Name	(Federal/ State/ CNPS)	Listing Potential	Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	Consider for Coverage?
<b>Species Associated with Proposed</b>	<b>Covered Natura</b>	l Communities				
Aster lentus Suisun Marsh aster	-/-/1B	+	+	+ (H, ID, O)	+	Yes
Cirsium crassicaule Slough thistle	-/-/1B	U	+	+ (H, ID)	+	Undetermined
Hibiscus lasiocarpus Rose-mallow	-/-/2	-	+	+ (H, ID, AD)	+	No
Juglans californica var. hindsii Northern California black walnut	-/-/1B	-	+	+ (H, ID)	+	No
Lathyrus jepsonii var. jepsonii Delta tule pea	-/-/1B	+	+	+ (H, ID, O)	+	Yes
Limosella subulata Delta mudwort	-/-/2	+	+	+ (H, ID, O)	+	Yes
Potamogeton zosteriformis Eel-grass pondweed	-/-/2	-	+	+ (H, ID, O)	+	No
Sagittaria sanfordi Sanford's arrowhead	-/-/1B	-	+	+ (H, ID)	+	No
Species Associated with other Plant	ning Area Natura	l Communities				
Astragalus rattanii var. jepsonianus Jepson's milk-vetch	-/-/1B	+	U	-	+	No
Astragalus tener var. ferrisiae Ferris' milk-vetch	-/-/1B	+	+	-	+	No

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/ State/ CNPS)	SELECTION CRITERIA FOR COVERAGE <sup>b</sup>				
		Listing Potential	Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	Consider for Coverage?
Astragalus tener var. tener Alkali milk-vetch	-/-/1B	+	+	+	+	Yes
Atriplex cordulata Heartscale	-/-/1B	+	+	U (AD)	+	Undetermined
Atriplex depressa Brittlescale	-/-/1B	+	+	U (AD)	+	Undetermined
Atriplex joaquiniana San Joaquin spearscale	-/-/1B	+	+	+ (AD)	+	Yes
Atriplex minuscula Lesser saltscale	-/-/1B	+	+	U (AD)	+	Undetermined
Atriplex persistens Vernal pool smallscale	-/-/1B	+	+	U (AD)	+	Undetermined
Blepharizonia plumosa Big tarplant	-/-/1B	+	+	U (AD)	+	Undetermined
Carex comosa Bristly sedge	-/-/2	U	+	+ (H, ID)	+	Undetermined
Delphinium recurvatum Recurved larkspur	-/-/1B	+	+	-	+	No
Erodium macrophyllum Round-leafed filaree	-/-/2	+	+	U (AD)	+	Undetermined
Eschscholzia rhombipetala Diamond-petaled California poppy	-/-/1B	+	+	-	+	No
Fritillaria liliacea Fragrant fritillary	-/-/1B	U	+	-	+	No
Fritillaria pluriflora Adobe-lily	-/-/1B	-	+	-	+	No

Scientific Name/	Status <sup>a</sup> (Federal/ State/ CNPS)	SELECTION CRITERIA FOR COVERAGE <sup>b</sup>				
Common Name		Listing Potential	Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	Consider for Coverage?
Hemizonia parryi spp. congdonii (aka Centromadia parryi spp. congdonii) Congdon's tarplant	-/-/1B	U	+	-	+	No
Juncus leiospermus var. ahartii Ahart's dwarf rush	-/-/1B	+	U	U (AD)	+	Undetermined
Legenere limosa Legenere	-/-/1B	+	+	+ (AD)	+	Yes
Lepidium latipes var. heckardii Heckard's peppergrass	-/-/1B	+	+	+	+	Yes
Madia radiata Showy madia	-/-/1B	+	+	-	+	No
Navarretia nigelliformis ssp. nigelliformis Adobe navarretia	-/-/1B	+	U	-	+	No
Tropidocarpum capparideum Caper-fruited tropidocarpum	-/-/1B	U	+	+ (H, ID)	+	Undetermined

### <sup>a</sup>Status Explanations Federal

= no status

#### State

– no status

## California Native Plant Society (CNPS)

1A = presumed extinct in California

1B = rare or endangered in California and elsewhere

2 = rare and endangered in California, more common elsewhere

– no status.

### <sup>b</sup> Criteria met or not

+ = species meets the selection criterion.

= species does not meet the selection criterion.

 $U = \hat{\ }$  Uncertain whether species meets selection criterion. More investigation required.

# <sup>c</sup> BDCP Actions (covered activities and conservation measures) potentially adversely affecting the species

H = habitat restoration actions

ID = in-Delta conveyance facilities

AD = around-Delta conveyance facilities

O = water operations

